IN THE CLAIMS

Please amend the claims as follows:

1. (original) Method of writing information to a record medium, wherein 152 code words [11(j)] each having 248 bytes [m1(i,j)] and 12 BIS words each having 62 BIS bytes [b₂(r,s)] are combined so as to form an ECC block (M3) having 38440 elements [m3(v,w)], which elements are consecutively written to said medium.

2. (Original) Method of writing information to a record medium, comprising the following steps:

(a)   calculating a predetermined number (Ne) of error correction bytes (Be) on the basis of a predetermined number (Nd) of data bytes (Bd) so as to form a code word (11) of 248 code word bytes;

(b)   repeating step (a) until 152 of said code words [11(j)] have been formed, each comprising 248 code word bytes [m1(i,j)],

j representing an index ranging from 0 to 151,

i representing an index ranging from 0 to 247;

(c)   generating 3 BIS lines [BL(s)] each comprising 248 BIS bytes [b₂(r,s)],

s representing an index ranging from 0 to 2,

r representing an index ranging from 0 to 247;

(d)   writing the combination of 152x248 code word bytes [m1(i,j)] and 3x248 BIS bytes [b₂(r,s)] in an order obtainable by:

(d1)   placing the 152 code words [11(j)] as columns in a 152x248 first matrix (M1) having first matrix elements [m1(i,j)];

(d2)   performing a predefined cyclic row shift operation on this first matrix (M1) so as to obtain a 152x248 second matrix (M2) having second matrix elements [m2(t,u)];

(d3)   placing the second matrix elements [m2(t,u)] of this second matrix (M2) at location [m3(v,w)] of a 155x248 third matrix (M3) in accordance with the following formulas:

$v = t$

$w = u + DIV(u,38)$

(d4)   placing the BIS bytes [$b_2(r,s)$] at location [m3(v,w)] of said 155x248 third matrix (M3) in accordance with the following formulas:

$v = r$

$w = 39*s + 38$

(d5)   writing the elements [m3(v,w)] of said 155x248 third matrix (M3) in a row-by-row fashion in accordance with the following formula:

$B(\xi) = m3(DIV(\xi,155),MOD(\xi,155))$, wherein

$B(\xi)$ indicates the ξ-th byte to be written, ξ being an index ranging from 0 to 38 439.

3. (Original) Method according to claim 2, wherein said cyclic row shift is performed in accordance with the following formulas:

$t = i$

$u = MOD(j - MOD(3*i,152) + 152,152)$

4. (original) Method according to claim 2, further comprising the steps of:

generating 12 BIS code words, each having 62 BIS bytes [$b_{BIS}(n,c)$],

c representing an index ranging from 0 to 11,

n representing an index ranging from 0 to 61;

and generating said 3 BIS lines [BL(s)] by combining 4 of said BIS code words so as to form a BIS line.

5. (Original) Method according to claim 4, wherein a relationship between said BIS bytes [$b_2(r,s)$] of said 3 BIS lines [BL(s)] on the one hand and said BIS bytes [$b_{BIS}(n,c)$] of said 12 BIS code words on the other hand complies with the following formulas:

$b_2(r,s) = b_{BIS}(n,c)$, with:

$s = MOD(\{c + 30 - DIV(n,2)\},3)$ and $r = 31*uu + DIV(n,2)$, wherein $uu = MOD(\{DIV(n,2) + 4 - DIV(c,3)\},4) + 4*MOD(n,2)$

6. (Original) Method according to claim 4, further comprising the steps of:

generating 8 address words each having 9 address bytes [$AF(x,y)$],

x representing an index ranging from 0 to 7,

y representing an index ranging from 0 to 8;

putting said address bytes [$AF(x,y)$] into said 12 BIS code words, wherein a relationship between said address bytes [$AF(x,y)$] of said address words on the one hand and said BIS bytes [$b_{BIS}(n,c)$] of said 12 BIS code words on the other hand complies with the following formulas:

$b_{BIS}(n,c) = AF(x,y)$ with:

$n = 2*DIV(x,3) + DIV(y,4)$

$c = 3*MOD(\{DIV(x,3) + 8 - y\},4) + MOD(\{x + DIV(x,3)\},3)$

7. Original) Method of reading information from a record medium, wherein an ECC block (M3) having 38 440 elements [$m3(v,w)$] is read, from which 152 code words [$11(j)$] each having 248 bytes [$m1(i,j)$] and 12 BIS words each having 62 BIS bytes [$b_2(r,s)$] are reconstructed.

8. (Original) Method of reading information from a record medium, comprising the following steps:

(a)   reading 38 440 consecutive bytes [$B(\xi)$],

ξ representing an index ranging from 0 to 38439;

(b)   reconstructing 152 code words [11(j)] from said read bytes [B(ξ)], each code word comprising 248 code word bytes [m1(i,j)],

j representing an index ranging from 0 to 151,

i representing an index ranging from 0 to 247;

wherein a relationship between said code word bytes [m1(i,j)] on the one hand and said read bytes [B(ξ)] on the other hand complies with the following formulas:

m1(i,j) = B(ξ), with ξ = i*155 + u + DIV(u,38)

wherein u = MOD(j - MOD(3*i,152) + 152,152)

9. (Original) Method according to claim 8, wherein, the 248 bytes are submitted to an error correction processing in each code word [11(j)] thus reconstructed;

        and wherein a predetermined number (Nd) from among the corrected bytes are outputted as data bytes (Bd).

10. (Original) Method according to claim 8, further comprising the step of reconstructing 12 BIS words from said read bytes [B(ξ)], each BIS word comprising 62 BIS bytes [b_{BIS}(n,c)];

c representing an index ranging from 0 to 11,

n representing an index ranging from 0 to 61;

wherein a relationship between said BIS bytes [b_{BIS}(n,c)] on the one hand and said read bytes [B(ξ)] on the other hand complies with the following formulas:

b_{BIS}(n,c) = B(ξ), with ξ = r*155 + 39*s + 38

wherein: s = MOD({c + 30 - DIV(n,2)},3)

          r = 31*uu + DIV(n,2)

with uu = MOD({DIV(n,2) + 4 - DIV(c,3)},4) + 4*MOD(n,2)

11. (Original) Method according to claim 10, further comprising the step of reconstructing 8 address words from said reconstructed BIS words, each address word comprising 9 address bytes $[AF(x,y)]$;

x representing an index ranging from 0 to 7,

y representing an index ranging from 0 to 8;

wherein a relationship between said address bytes $[AF(x,y)]$ on the one hand and said BIS bytes $[b_{BIS}(n,c)]$ on the other hand complies with the following formulas:

$AF(x,y) = b_{BIS}(n,c)$, with $n = 2*DIV(x,3) + DIV(y,4)$

$c = 3*MOD(\{DIV(x,3) + 8 - y\},4) + MOD(\{x + DIV(x,3)\},3)$

12. (Currently amended) Information recording/reading apparatus (1) designed to write information to a record medium (2) in accordance with any of claims 1-6, or to read information from a record medium (2) in accordance with ~~any of claims 7-11~~ claim 7, respectively.

13. (Currently amended) Record carrier (2) containing information written by a method in accordance with ~~any of claims 1-6~~ claim 1.